

Humidity:

O	peration Mode:	TX / IEEE 802 11b	(Antenna 2)	/ CH I ow Test Date	: March 21. 2	013
U						.0.10

Temperature: 24°C

52% RH

Tested by: Leevin Li Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3760.0000	44.42	-2.59	41.83	74.00	-32.17	V	peak
4915.0000	42.16	0.93	43.09	74.00	-30.91	V	peak
5155.0000	44.46	1.50	45.96	74.00	-28.04	V	peak
5965.0000	43.77	3.04	46.81	74.00	-27.19	V	peak
6955.0000	43.83	6.12	49.95	74.00	-24.05	V	peak
7315.0000	49.92	7.49	57.41	74.00	-16.59	V	peak
7315.0000	43.77	7.49	51.26	54.00	-2.74	V	AVG
3760.0000	45.63	-2.59	43.04	74.00	-30.96	Н	Peak
4330.0000	45.54	-1.09	44.45	74.00	-29.55	Н	Peak
5350.0000	45.43	1.53	46.96	74.00	-27.04	Н	Peak
5815.0000	44.27	2.80	47.07	74.00	-26.93	Н	Peak
6280.0000	44.89	3.92	48.81	74.00	-25.19	Н	Peak
6685.0000	44.35	5.11	49.46	74.00	-24.54	Н	Peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Temperature	: 24°C			-	Tested by:	Leevin L	i
Humidity:	52% R	RH		I	Polarity:	Ver. / Ho	r.
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3430.0000	45.47	-3.85	41.62	74.00	-32.38	V	peak
4450.0000	44.66	-0.73	43.93	74.00	-30.07	V	peak
4930.0000	44.26	1.00	45.26	74.00	-28.74	V	peak
6220.0000	42.65	3.74	46.39	74.00	-27.61	V	peak
6805.0000	44.09	5.52	49.61	74.00	-24.39	V	peak
7390.0000	50.69	7.57	58.26	74.00	-15.74	V	peak
7390.0000	42.96	7.57	50.53	54.00	-3.47	V	AVG
2575.0000	49.23	-5.93	43.30	74.00	-30.70	Н	Peak
3265.0000	47.21	-4.06	43.15	74.00	-30.85	Н	Peak
3865.0000	46.30	-2.50	43.80	74.00	-30.20	Н	Peak
4270.0000	45.40	-1.31	44.09	74.00	-29.91	Н	Peak
5155.0000	44.76	1.50	46.26	74.00	-27.74	Н	Peak
5995.0000	46.18	3.08	49.26	74.00	-24.74	Н	Peak

Operation Mode: TX / IEEE 802.11b (Antenna 2)/ CH High Test Date: March 21, 2013

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation Mode: TX / IEEE 802.11g (Antenna 1)/ CH Low Test Date: March 21, 2013										
Temperature	: 24°C				Tested by:	Leevin L	i			
Humidity:	Humidity: 52% RH				Polarity:	Ver. / Ho	or.			
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark			
3640.0000	46.16	-2.91	43.25	74.00	-30.75	V	Peak			
4870.0000	43.90	0.73	44.63	74.00	-29.37	V	Peak			
5320.0000	44.26	1.53	45.79	74.00	-28.21	V	Peak			
5785.0000	44.66	2.72	47.38	74.00	-26.62	V	Peak			
6235.0000	44.83	3.79	48.62	74.00	-25.38	V	Peak			
7240.0000	57.41	7.41	64.82	74.00	-9.18	V	Peak			
7240.0000	42.18	7.41	49.59	54.00	-4.41	V	AVG			
3160.0000	46.70	-4.12	42.58	74.00	-31.42	Н	Peak			
3745.0000	45.91	-2.63	43.28	74.00	-30.72	Н	Peak			
4240.0000	45.31	-1.43	43.88	74.00	-30.12	Н	Peak			
5005.0000	45.23	1.33	46.56	74.00	-27.44	Н	Peak			
5575.0000	45.63	1.88	47.51	74.00	-26.49	Н	Peak			
6265.0000	45.08	3.88	48.96	74.00	-25.04	Н	Peak			

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Humidity:

O	peration	Mode: T	X / IEEE	802.11a	(Antenna	1)/	CH Mid	Test Date:	March 21.	2013
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Temperature:	24°C
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52 % RH

Tested by: Leevin Li Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3835.0000	46.12	-2.50	43.62	74.00	-30.38	V	Peak
4450.0000	45.68	-0.73	44.95	74.00	-29.05	V	Peak
5110.0000	44.76	1.45	46.21	74.00	-27.79	V	Peak
5770.0000	45.66	2.65	48.31	74.00	-25.69	V	Peak
6295.0000	44.95	3.97	48.92	74.00	-25.08	V	Peak
7300.0000	52.20	7.47	59.67	74.00	-14.33	V	Peak
7300.0000	36.81	7.47	44.28	54.00	-9.72	V	AVG
3580.0000	46.20	-3.11	43.09	74.00	-30.91	Н	Peak
4495.0000	45.17	-0.65	44.52	74.00	-29.48	Н	Peak
4990.0000	44.74	1.27	46.01	74.00	-27.99	Н	Peak
5605.0000	45.49	1.95	47.44	74.00	-26.56	Н	Peak
5830.0000	45.60	2.83	48.43	74.00	-25.57	Н	Peak
7300.0000	45.15	7.47	52.62	74.00	-21.38	Н	Peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation Mode: TX / IEEE 802.11g(Antenna 1) / CH High Test Date: March 21, 2013

Temperature	emperature: 24°C Tested by: Leevin Li									
Humidity:	52 % F	RH			Polarity:	Ver. / Hor				
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark			
1405.0000	48.35	-7.85	40.50	74.00	-33.50	V	Peak			
3235.0000	46.55	-4.07	42.48	74.00	-31.52	V	Peak			
4135.0000	46.08	-1.89	44.19	74.00	-29.81	V	Peak			
4975.0000	44.51	1.21	45.72	74.00	-28.28	V	Peak			
5755.0000	45.77	2.59	48.36	74.00	-25.64	V	Peak			
7390.0000	52.61	7.57	60.18	74.00	-13.82	V	Peak			
7390.0000	38.71	7.57	46.28	54.00	-7.72	V	AVG			
3355.0000	46.49	-4.02	42.47	74.00	-31.53	Н	Peak			
3865.0000	46.52	-2.50	44.02	74.00	-29.98	Н	Peak			
4525.0000	45.08	-0.59	44.49	74.00	-29.51	Н	Peak			
4915.0000	45.47	0.93	46.40	74.00	-27.60	Н	Peak			
5380.0000	44.75	1.52	46.27	74.00	-27.73	Н	Peak			
6205.0000	44.31	3.70	48.01	74.00	-25.99	Н	Peak			

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation Mode:	TX / I	EEE 80)2.11	g(Antenna 2	2) / CH Low	Test Date:	March 27	1, 2013
Temperature:	24°C					Tested by	: Leevin Li	i
Humidity:	52% I	RH				Polarity:	Ver. / Ho	r.

Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pole (V/H)	Remark			
3220.0000	50.92	-4.08	46.84	74.00	-27.16	V	Peak			
4825.0000	45.30	0.52	45.82	74.00	-28.18	V	Peak			
5245.0000	44.90	1.54	46.44	74.00	-27.56	V	Peak			
5890.0000	44.03	2.92	46.95	74.00	-27.05	V	Peak			
6685.0000	43.84	5.11	48.95	74.00	-25.05	V	Peak			
7240.0000	50.07	7.41	57.48	74.00	-16.52	V	Peak			
7240.0000	40.30	7.41	47.71	54.00	-6.29	V	AVG			
1465.0000	48.77	-8.11	40.66	74.00	-33.34	Н	Peak			
3760.0000	45.48	-2.59	42.89	74.00	-31.11	Н	Peak			
4960.0000	45.25	1.14	46.39	74.00	-27.61	Н	Peak			
5710.0000	44.68	2.40	47.08	74.00	-26.92	Н	Peak			
6220.0000	44.45	3.74	48.19	74.00	-25.81	Н	Peak			
6625.0000	44.40	4.91	49.31	74.00	-24.69	Н	Peak			

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Humidity:

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Temperature: 24°C

52 % RH

Tested by: Leevin Li Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3250.0000	49.80	-4.07	45.73	74.00	-28.27	V	Peak
4480.0000	44.56	-0.68	43.88	74.00	-30.12	V	Peak
5290.0000	45.30	1.54	46.84	74.00	-27.16	V	Peak
5905.0000	44.34	2.94	47.28	74.00	-26.72	V	Peak
6325.0000	44.96	4.05	49.01	74.00	-24.99	V	Peak
7315.0000	54.81	7.49	62.30	74.00	-11.70	V	Peak
7315.0000	40.12	7.49	47.61	54.00	-6.39	V	AVG
3250.0000	47.91	-4.07	43.84	74.00	-30.16	Н	Peak
4180.0000	45.35	-1.67	43.68	74.00	-30.32	Н	Peak
4915.0000	45.57	0.93	46.50	74.00	-27.50	Н	Peak
5560.0000	44.44	1.85	46.29	74.00	-27.71	Н	Peak
6205.0000	44.08	3.70	47.78	74.00	-26.22	Н	Peak
6475.0000	44.87	4.47	49.34	74.00	-24.66	Н	Peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Humidity:

Operation Mode:	TX / IEEE	802.11g(Antenna	a 2) / CH High	Test Date: March 21	1.2013
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Temperature: 24°C

52 % RH

Tested by: Leevin Li Polarity: Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3340.0000	47.58	-4.03	43.55	74.00	-30.45	V	Peak
4420.0000	45.38	-0.78	44.60	74.00	-29.40	V	Peak
5050.0000	45.04	1.38	46.42	74.00	-27.58	V	Peak
5500.0000	44.86	1.73	46.59	74.00	-27.41	V	Peak
6100.0000	45.74	3.39	49.13	74.00	-24.87	V	Peak
6820.0000	44.43	5.57	50.00	74.00	-24.00	V	Peak
3280.0000	48.39	-4.05	44.34	74.00	-29.66	Н	Peak
4195.0000	46.30	-1.60	44.70	74.00	-29.30	Н	Peak
4930.0000	46.12	1.00	47.12	74.00	-26.88	Н	Peak
5725.0000	45.49	2.46	47.95	74.00	-26.05	Н	Peak
6025.0000	45.06	3.16	48.22	74.00	-25.78	Н	Peak
7015.0000	44.66	6.43	51.09	74.00	-22.91	Н	Peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation Mode:	TX / IE (Anten	TX / IEEE 802.11n HT20 MHz (Antenna 1) / CH Low Test Date: March 21, 2013					3
Temperature:	24°C			Te	ested by:∟	eevin Li	
Humidity:	52% F	RH Polarity: Ver. / Hor.					
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3160.0000	47.49	-4.12	43.37	74.00	-30.63	V	Peak
3985.0000	46.06	-2.53	43.53	74.00	-30.47	V	Peak
4885.0000	45.82	0.80	46.62	74.00	-27.38	V	Peak
5230.0000	46.41	1.55	47.96	74.00	-26.04	V	Peak
6505.0000	45.71	4.55	50.26	74.00	-23.74	V	Peak
7225.0000	56.75	7.40	64.15	74.00	-9.85	V	Peak
7225.0000	41.97	7.40	49.37	54.00	-4.63	V	AVG
3190.0000	47.35	-4.10	43.25	74.00	-30.75	Н	Peak
4150.0000	45.44	-1.82	43.62	74.00	-30.38	Н	Peak
4825.0000	46.02	0.52	46.54	74.00	-27.46	Н	Peak
5770.0000	44.77	2.65	47.42	74.00	-26.58	Н	Peak
6550.0000	44.28	4.68	48.96	74.00	-25.04	Н	Peak
7225.0000	51.09	7.40	58.49	74.00	-15.51	Н	Peak
7225.0000	35.89	7.40	43.29	54.00	-10.71	Н	AVG

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation Mode:	TX / IEEE 802.11n HT20 MHz (Antenna 1) / CH Mid	Test Date:	March 21, 2013
Temperature:	24°C	Tested by:	Leevin Li
Humidity:	52% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
2560.0000	49.60	-5.98	43.62	74.00	-30.38	V	Peak
3685.0000	45.51	-2.79	42.72	74.00	-31.28	V	Peak
4270.0000	46.51	-1.31	45.20	74.00	-28.80	V	Peak
5095.0000	45.95	1.43	47.38	74.00	-26.62	V	Peak
6130.0000	44.53	3.48	48.01	74.00	-25.99	V	Peak
7315.0000	52.76	7.49	60.25	74.00	-13.75	V	Peak
7315.0000	37.90	7.49	45.39	54.00	-8.61	V	AVG
3040.0000	47.34	-4.21	43.13	74.00	-30.87	Н	Peak
3985.0000	45.92	-2.53	43.39	74.00	-30.61	Н	Peak
5200.0000	45.12	1.55	46.67	74.00	-27.33	Н	Peak
5800.0000	44.53	2.78	47.31	74.00	-26.69	Н	Peak
6895.0000	44.44	5.82	50.26	74.00	-23.74	Н	Peak
7315.0000	49.20	7.49	56.69	74.00	-17.31	Н	Peak
7315.0000	36.09	7.49	43.58	54.00	-10.42	Н	AVG

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation Mode:TX / IEEE 802.11n (Antenna 1)/ CH HiTemperature:24°C			11n HT20 M H High	Hz	Test Date	ə: March 21, : y: Leevin Li	2013
Humidity:	52	% RH			Polarity:	Ver. / Hor.	
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
2830.0000	47.51	-4.92	42.59	74.00	-31.41	V	Peak
3475.0000	46.33	-3.63	42.70	74.00	-31.30	V	Peak
4330.0000	46.12	-1.09	45.03	74.00	-28.97	V	Peak
5320.0000	45.42	1.53	46.95	74.00	-27.05	V	Peak
6310.0000	44.73	4.01	48.74	74.00	-25.26	V	Peak
7390.0000	53.68	7.57	61.25	74.00	-12.75	V	Peak
7390.0000	39.27	7.57	46.84	54.00	-7.16	V	AVG
2560.0000	48.26	-5.98	42.28	74.00	-31.72	Н	Peak
3865.0000	46.07	-2.50	43.57	74.00	-30.43	Н	Peak
4825.0000	45.56	0.52	46.08	74.00	-27.92	Н	Peak
5155.0000	46.06	1.50	47.56	74.00	-26.44	Н	Peak
6055.0000	44.70	3.25	47.95	74.00	-26.05	Н	Peak
6745.0000	44.39	5.31	49.70	74.00	-24.30	Н	Peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation M	ode: TX /	IEEE 802.1 enna 2)/ CH	1n HT20 M⊦ Low	łz	Test Date:	: March 21, 2	2013
Temperature	e: 24°C				Tested by	: Leevin Li	
Humidity:	52%	RH			Polarity:	Ver. / Hor.	
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3220.0000	49.92	-4.08	45.84	74.00	-28.16	V	Peak
3865.0000	46.60	-2.50	44.10	74.00	-29.90	V	Peak
4405.0000	45.59	-0.81	44.78	74.00	-29.22	V	Peak
5245.0000	44.80	1.54	46.34	74.00	-27.66	V	Peak
6250.0000	43.87	3.83	47.70	74.00	-26.30	V	Peak
7240.0000	54.94	7.41	62.35	74.00	-11.65	V	Peak
7240.0000	39.87	7.41	47.28	54.00	-6.72	V	AVG
3210.0000	48.33	-4.09	44.24	74.00	-29.76	Н	Peak
4400.0000	44.16	-0.82	43.34	74.00	-30.66	Н	Peak
5193.3333	44.38	1.54	45.92	74.00	-28.08	Н	Peak
5930.0000	43.80	2.98	46.78	74.00	-27.22	Н	Peak
6383.3333	44.92	4.21	49.13	74.00	-24.87	Н	Peak
7233.3333	49.44	7.40	56.84	74.00	-17.16	Н	Peak
7233.3333	35.86	7.40	43.26	54.00	-10.74	Н	AVG

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation Mode	TX / IEEE 802.11n HT20 MHz	Tost Data:	March 21 2013
operation mode.	(Antenna 2)/ CH Mid	lest Date.	March 21, 2013
Temperature:	24°C	Tested by:	Leevin Li
Humidity:	52% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3190.0000	46.79	-4.10	42.69	74.00	-31.31	V	Peak
4255.0000	45.52	-1.37	44.15	74.00	-29.85	V	Peak
4990.0000	44.99	1.27	46.26	74.00	-27.74	V	Peak
5500.0000	44.93	1.73	46.66	74.00	-27.34	V	Peak
6175.0000	44.98	3.61	48.59	74.00	-25.41	V	Peak
6400.0000	45.02	4.26	49.28	74.00	-24.72	V	Peak
3250.0000	49.09	-4.07	45.02	74.00	-28.98	Н	Peak
4420.0000	44.35	-0.78	43.57	74.00	-30.43	Н	Peak
4960.0000	44.93	1.14	46.07	74.00	-27.93	Н	Peak
5740.0000	44.38	2.52	46.90	74.00	-27.10	Н	Peak
6280.0000	44.50	3.92	48.42	74.00	-25.58	Н	Peak
6760.0000	44.76	5.36	50.12	74.00	-23.88	Н	Peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation Mode:	TX / IEEE 802.11n HT20 MHz (Antenna 2)/ CH High	Test Date:	March 21, 2013
Temperature:	24°C	Tested by:	Leevin Li
Humidity:	52% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3280.0000	50.82	-4.05	46.77	74.00	-27.23	V	Peak
4300.0000	45.55	-1.20	44.35	74.00	-29.65	V	Peak
5065.0000	45.03	1.39	46.42	74.00	-27.58	V	Peak
5605.0000	44.71	1.95	46.66	74.00	-27.34	V	Peak
6280.0000	44.60	3.92	48.52	74.00	-25.48	V	Peak
7390.0000	52.61	7.57	60.18	74.00	-13.82	V	Peak
7390.0000	38.58	7.57	46.15	54.00	-7.85	V	AVG
3280.0000	47.67	-4.05	43.62	74.00	-30.38	Н	Peak
4390.0000	46.02	-0.86	45.16	74.00	-28.84	Н	Peak
5095.0000	44.83	1.43	46.26	74.00	-27.74	Н	Peak
6025.0000	44.50	3.16	47.66	74.00	-26.34	Н	Peak
6415.0000	45.44	4.30	49.74	74.00	-24.26	Н	Peak
7390.0000	45.73	7.57	53.30	74.00	-20.70	Н	Peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation Mode:	TX / IEEE 802.11n HT40 MHz (Antenna 1) / CH Low	Test Date:	March 21, 2013
Temperature:	24°C	Tested by:	Leevin Li
Humidity:	52% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3235.0000	53.33	-4.07	49.26	74.00	-24.74	V	Peak
4150.0000	45.20	-1.82	43.38	74.00	-30.62	V	Peak
4900.0000	44.78	0.86	45.64	74.00	-28.36	V	Peak
5050.0000	44.92	1.38	46.30	74.00	-27.70	V	Peak
6325.0000	45.79	4.05	49.84	74.00	-24.16	V	Peak
7270.0000	51.05	7.44	58.49	74.00	-15.51	V	Peak
7270.0000	36.07	7.44	43.51	54.00	-10.49	V	AVG
3235.0000	51.78	-4.07	47.71	74.00	-26.29	Н	Peak
4000.0000	45.62	-2.53	43.09	74.00	-30.91	Н	Peak
4585.0000	44.69	-0.49	44.20	74.00	-29.80	Н	Peak
5200.0000	44.26	1.55	45.81	74.00	-28.19	Н	Peak
5755.0000	45.72	2.59	48.31	74.00	-25.69	Н	Peak
6505.0000	45.20	4.55	49.75	74.00	-24.25	Н	Peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation Mode:	TX / IEEE 802.11n HT40 MHz	Test Date:	March 21 2013	
Operation mode.	(Antenna 1)/ CH Mid	Test Date.	March 21, 2013	
Temperature:	24°C	Tested by:	Leevin Li	
Humidity:	52% RH	Polarity:	Ver. / Hor.	

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3250.0000	52.03	-4.07	47.96	74.00	-26.04	V	Peak
4405.0000	44.84	-0.81	44.03	74.00	-29.97	V	Peak
5200.0000	45.78	1.55	47.33	74.00	-26.67	V	Peak
6340.0000	44.82	4.09	48.91	74.00	-25.09	V	Peak
6910.0000	45.94	5.89	51.83	74.00	-22.17	V	Peak
7315.0000	49.92	7.49	57.41	74.00	-16.59	V	Peak
7315.0000	35.72	7.49	43.21	54.00	-10.79	V	AVG
3250.0000	49.51	-4.07	45.44	74.00	-28.56	Н	Peak
3940.0000	45.92	-2.52	43.40	74.00	-30.60	Н	Peak
4855.0000	45.69	0.66	46.35	74.00	-27.65	Н	Peak
5110.0000	44.71	1.45	46.16	74.00	-27.84	Н	Peak
5755.0000	45.54	2.59	48.13	74.00	-25.87	Н	Peak
6490.0000	43.92	4.51	48.43	74.00	-25.57	Н	Peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "--- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation Mode:	TX / IEEE 802.11n HT40 MHz (Antenna 1) / CH High Test Date: March 21, 2013						
Temperature	e: 24°C			Teste	ed by: Lee	evin Li	
Humidity:	52% F	RH		Pola	rity: Ve	r. / Hor.	
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3266.6667	50.72	-4.06	46.66	74.00	-27.34	V	Peak
4201.6667	45.74	-1.57	44.17	74.00	-29.83	V	Peak
4966.6667	44.73	1.17	45.90	74.00	-28.10	V	Peak
5618.3333	44.25	2.01	46.26	74.00	-27.74	V	Peak
6128.3333	44.44	3.47	47.91	74.00	-26.09	V	Peak
7375.0000	49.93	7.55	57.48	74.00	-16.52	V	Peak
7375.0000	35.73	7.55	43.28	54.00	-10.72	V	AVG
3266.6667	49.69	-4.06	45.63	74.00	-28.37	Н	Peak
4456.6667	44.52	-0.72	43.80	74.00	-30.20	Н	Peak
4938.3333	45.09	1.04	46.13	74.00	-27.87	Н	Peak
5306.6667	44.91	1.53	46.44	74.00	-27.56	Н	Peak
5760.0000	44.96	2.61	47.57	74.00	-26.43	Н	Peak
7148.3333	43.58	7.11	50.69	74.00	-23.31	Н	Peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation M	l ode: TX / (Ante	IEEE 802.1 enna 2)/ CH	1n HT40 MH Low	۲ ^{Hz}	Fest Date:	March 21, 20	13
Temperature:24°CTested by: Leevin Li							
Humidity:	52%	RH		F	Polarity:	Ver. / Hor.	
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3266.6667	46.57	-4.06	42.51	74.00	-31.49	V	Peak
3833.3333	45.80	-2.50	43.30	74.00	-30.70	V	Peak
4825.0000	45.64	0.52	46.16	74.00	-27.84	V	Peak
5788.3333	44.47	2.73	47.20	74.00	-26.80	V	Peak
6836.6667	44.09	5.62	49.71	74.00	-24.29	V	Peak
7290.0000	53.78	7.46	61.24	74.00	-12.76	V	Peak
7290.0000	39.02	7.46	46.48	54.00	-7.52	V	AVG
3266.6667	46.54	-4.06	42.48	74.00	-31.52	Н	Peak
4485.0000	45.37	-0.67	44.70	74.00	-29.30	н	Peak
4938.3333	44.97	1.04	46.01	74.00	-27.99	Н	Peak
5845.0000	43.57	2.85	46.42	74.00	-27.58	Н	Peak
6950.0000	44.32	6.09	50.41	74.00	-23.59	Н	Peak

7290.0000

7290.0000

49.38

33.80

7.46

7.46

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

74.00

54.00

-17.16

-12.74

Н

Н

Peak

AVG

- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.

56.84

41.26

- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation Mode:	TX / IEEE 802.11n HT40 MHz	Test Date:	March 21, 2013
	(Antenna 2)/ CH Mid		,
Temperature:	24°C	Tested by:	Leevin Li
Humidity:	52% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3861.6667	45.82	-2.50	43.32	74.00	-30.68	V	Peak
4966.6667	44.34	1.17	45.51	74.00	-28.49	V	Peak
5193.3333	45.69	1.54	47.23	74.00	-26.77	V	Peak
6525.0000	44.27	4.61	48.88	74.00	-25.12	V	Peak
6780.0000	44.16	5.43	49.59	74.00	-24.41	V	Peak
7318.3333	49.77	7.49	57.26	74.00	-16.74	V	Peak
7318.3333	35.69	7.49	43.18	54.00	-10.82	V	AVG
3238.3333	46.74	-4.07	42.67	74.00	-31.33	Н	Peak
3833.3333	46.05	-2.50	43.55	74.00	-30.45	Н	Peak
4711.6667	44.47	0.03	44.50	74.00	-29.50	Н	Peak
5731.6667	44.25	2.49	46.74	74.00	-27.26	Н	Peak
6468.3333	44.77	4.45	49.22	74.00	-24.78	Н	Peak
7176.6667	44.52	7.25	51.77	74.00	-22.23	Н	Peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



Operation Mode:	TX / IEEE 802.11n HT40 MHz (Antenna 2)/ CH High	Test Date:	March 21, 2013
Temperature:	24°C	Tested by:	Leevin Li
Humidity:	52% RH	Polarity:	Ver. / Hor.

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
3323.3333	46.45	-4.03	42.42	74.00	-31.58	V	Peak
3918.3333	45.79	-2.51	43.28	74.00	-30.72	V	Peak
4910.0000	45.60	0.91	46.51	74.00	-27.49	V	Peak
6468.3333	44.15	4.45	48.60	74.00	-25.40	V	Peak
6921.6667	45.07	5.95	51.02	74.00	-22.98	V	Peak
7346.6667	45.40	7.52	52.92	74.00	-21.08	V	Peak
3266.6667	46.98	-4.06	42.92	74.00	-31.08	Н	Peak
4173.3333	45.51	-1.71	43.80	74.00	-30.20	Н	Peak
4881.6667	45.66	0.78	46.44	74.00	-27.56	Н	Peak
5816.6667	44.51	2.81	47.32	74.00	-26.68	Н	Peak
6496.6667	43.64	4.53	48.17	74.00	-25.83	Н	Peak
7063.3333	43.36	6.67	50.03	74.00	-23.97	Н	Peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown "--- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).



7.3. 6dB BANDWIDTH MEASUREMENT

7.3.1. LIMITS

According to §15.247(a)(2), systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

7.3.2. TEST INSTRUMENTS

Name of Equipment	Manufacturer	Model	Serial Number	Last Calibration	Calibration Due
Spectrum Analyzer	Agilent	E4446A	US44300399	03/09/2013	03/08/2014

7.3.3. TEST PROCEDURES (please refer to measurement standard)

- 1. Place the EUT on the table and set it in the transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set the spectrum analyzer as RBW = 1-5 % of the emission bandwidth (EBW), VBW = ≥ 3 x RBW, Sweep = auto.
- 4. Mark the peak frequency and –6dB (upper and lower) frequency.
- 5. Repeat until all the rest channels are investigated.

7.3.4. TEST SETUP





7.3.5. TEST RESULTS

No non-compliance noted

<u>Test Data</u>

Test mode: IEEE 802.11b (Antenna 2)

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
Low	2412	8086		PASS
Mid	2437	8131	>500	PASS
High	2462	8075		PASS

Test mode: IEEE 802.11g (Antenna 1)

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
Low	2412	15141		PASS
Mid	2437	15131	>500	PASS
High	2462	15162		PASS

Test mode: IEEE 802.11g (Antenna 2)

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
Low	2412	15096		PASS
Mid	2437	15141	>500	PASS
High	2462	15145		PASS

Test mode: IEEE 802.11n HT20 MHz (Antenna 1)

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
Low	2412	15136		PASS
Mid	2437	15136	>500	PASS
High	2462	15136		PASS

Test mode: IEEE 802.11n HT20 MHz (Antenna 2)

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
Low	2412	15144		PASS
Mid	2437	15130	>500	PASS
High	2462	15126		PASS



Test mode: IEEE 802.11n HT40 MHz (Antenna 1)

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
Low	2422	35478		PASS
Mid	2437	35754	>500	PASS
High	2452	35734		PASS

Test mode: IEEE 802.11n HT40 MHz (Antenna 2)

Channel	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
Low	2422	35189		PASS
Mid	2437	35718	>500	PASS
High	2452	35712		PASS



Test Plot

IEEE 802.11b (Antenna 2)mode

6dB Bandwidth (CH Low)



Transmit Freq Error 20.572 kHz 8.086 MHz

6dB Bandwidth (CH Mid)



Transmit Freq Error 12.495 kHz x dB Bandwidth 8.131 MHz



6dB Bandwidth (CH High)



Transmit Freq Error 21.396 kHz x dB Bandwidth 8.075 MHz

IEEE 802.11g (Antenna 1) mode

6dB Bandwidth (CH Low)



Transmit Freq Error 22.067 kHz x dB Bandwidth 25.141 MHz



6dB Bandwidth (CH Mid)



Transmit Freq Error 20.225 kHz x dB Bandwidth 15.162 MHz



IEEE 802.11g (Antenna 2) mode



x dB Bandwidth 15.141 MHz



6dB Bandwidth (CH High)



Transmit Freq Error 21.761 kHz x dB Bandwidth 21.761 kHz

IEEE 802.11n HT20 MHz (Antenna 1)mode



Transmit Freq Error21.606 kHzx dB Bandwidth15.136 MHz



6dB Bandwidth (CH Mid)



Transmit Freq Error 15.048 kHz x dB Bandwidth 15.136 MHz



IEEE 802.11n HT20 MHz (Antenna 2)mode



x dB Bandwidth 15.130 MHz



6dB Bandwidth (CH High)



Transmit Freq Error 18.822 kHz x dB Bandwidth 15.126 MHz

IEEE 802.11n HT40 MHz (Antenna 1) mode



6dB Bandwidth (CH Low)

Transmit Freq Error80.573 kHzx dB Bandwidth35.478 MHz



6dB Bandwidth (CH Mid)



Transmit Freq Error 67.876 kHz 35.734 MHz



IEEE 802.11n HT40 MHz (Antenna 2) mode



Transmit Freq Error 85.945 kHz x dB Bandwidth 85.189 MHz





Transmit Freq Error 84.595 kHz 35.718 MHz



6dB Bandwidth (CH High)



Transmit Freq Error87.897 kHzx dB Bandwidth35.712 MHz



7.4. PEAK OUTPUT POWER

7.4.1. LIMITS

The maximum peak output power of the intentional radiator shall not exceed the following:

- 1. According to §15.247(b)(3), for systems using digital modulation in the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz: 1 Watt.
- 2. According to §15.247(b)(4), the conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

7.4.2. TEST INSTRUMENTS

Name of Equipment	Manufacturer	Model	Serial Number	Last Calibration	Calibration Due
Spectrum Analyzer	Agilent	E4446A	US44300399	03/09/2013	03/08/2014

7.4.3. TEST PROCEDURES (please refer to measurement standard)

- 1. This procedure provides an integrated measurement alternative when the maximum available RBW < EBW.
- 2. Set the RBW = 1 MHz.
- 3. Set the VBW = 3 MHz.
- 4. Set the span to a value that is 5-30 % greater than the EBW.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Use the spectrum analyzer's integrated band power measurement function with band limits set equal to the EBW band edges(for some analyzers, this may require a manual overrideto ensure use of peak detector). If the spectrum analyzer does not have a band power function, sum the spectrum levels (in linear power units) at 1 MHz intervals extending across the EBW of the spectrum.



7.4.4. TEST SETUP



7.4.5. TEST RESULTS

No non-compliance noted <u>Test Data</u> Test mode: IEEE 802.11b (Antenna 2)

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	16.62	0.04592		PASS
Mid	2437	16.61	0.04581	1	PASS
High	2462	16.80	0.04786		PASS

Test mode: IEEE 802.11g (Antenna 1)

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	13.47	0.02223		PASS
Mid	2437	13.69	0.02339	1	PASS
High	2462	13.29	0.02133		PASS

Test mode: IEEE 802.11g (Antenna 2)

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	13.30	0.02138		PASS
Mid	2437	12.92	0.01959	1	PASS
High	2462	13.31	0.02143		PASS

Test mode: IEEE 802.11n HT20 MHz (Antenna 1)

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	13.47	0.02223		PASS
Mid	2437	13.56	0.02270	1	PASS
High	2462	13.30	0.02138		PASS



Test mode: IEEE 802.11n HT20 MHz (Antenna 2)

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2412	13.10	0.02042		PASS
Mid	2437	12.90	0.01950	1	PASS
High	2462	13.28	0.02128		PASS

Test mode: IEEE 802.11n HT40 MHz (Antenna 1)

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2422	12.08	0.01614		PASS
Mid	2437	12.24	0.01675	1	PASS
High	2452	12.36	0.01722		PASS

Test mode: IEEE 802.11n HT40 MHz (Antenna 2)

Channel	Frequency (MHz)	Output Power (dBm)	Output Power (W)	Limit (W)	Result
Low	2422	12.21	0.01663		PASS
Mid	2437	12.17	0.01648	1	PASS
High	2452	12.59	0.01816		PASS



<u>Test Plot</u>

IEEE 802.11b(Antenna 2) mode

Peak power (CH Low)



Peak power (CH Mid)





Peak power (CH High)



IEEE 802.11g (Antenna 1)mode



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Peak power (CH Mid)



Peak power (CH High)





IEEE 802.11g (Antenna 2)mode



Peak power (CH Mid)





Peak power (CH High)



IEEE 802.11n HT20 MHz (Antenna 1)mode





Peak power (CH Mid)









IEEE 802.11n HT20 MHz (Antenna 2)mode



Peak power (CH Mid)





Peak power (CH High)



IEEE 802.11n HT40 MHz (Antenna 1)mode

